SYSTEM AND METHOD FOR SYNCHRONIZING CLOCK DIVIDERS IN A WIRELESS NETWORK

ABSTRACT OF THE DISCLOSURE

A wireless network includes a plurality of base stations that provide a wireless communication capability for a plurality of mobile stations. Each base station includes a local clock unit with a clock divider that generates local clock signals from a master clock signal received from a master clock source. The base stations are partitioned into a plurality of clusters. A sync pulse is propagated to each base station of the wireless network in order to reset their respective clock dividers. resetting of the clock dividers provides synchronization of local clock signals among the base stations. The sync pulse is propagated to all bases stations within a first cluster wherein one of the base stations in the first cluster is also a member of a second cluster. The base station that is part of the first and second clusters then propagates the sync pulse to other base stations in the second cluster and so on until the sync pulse has been delivered to all base stations in the wireless network.